



# Town of Voluntown

## Snow and Ice Control Policy

### **PURPOSE**

To clearly identify performance expectations, scope of work, materials used, and to describe operational procedures specific to snow and ice control by the Town of Voluntown.

### **GENERAL POLICY**

To provide Snow and Ice Control to Identified (see Scope) Town of Voluntown property and rights-of-way for vehicular, and pedestrian passage including but not limited to the event of emergency. The level of expectation identified to be met are bare and dry roads at the earliest practical time following the cessation of snow and or ice storm. It is impractical to maintain bare pavement continuously during a winter storm. There are many variables affecting winter maintenance operations such as type of precipitation, air and road temperature, traffic, wind, time of day, and day of week. Judgement based on experience is essential in conducting and timing remedial work to overcome ice and snow hazards. It is impractical to develop specific rules on winter maintenance due to the numerous variables. It is the intent of the Town of Voluntown to use the minimum deicing or anti-icing material needed to restore safe travel conditions as soon as practical following the cessation of winter storms.

## 1. SCOPE

1. Town Roads
  - a. 30 miles of improved roads
  - b. Town/State Road intersections
  - c. 2.25 miles unimproved roads
  - d. Dennison Hill Road (Contractor)
2. Parking lots
  - a. Town Hall / Library
  - b. Gate Street Recreation Lots
  - c. Transfer Station (Contractor)
  - d. Voluntown Department of Public Works (VDPW) Garage Parking Lot
  - e. School Lots (Contractor with Town emergency assist)
  - f. State North Shore Road Boat Launch Helipad
3. Emergency Hydrant access
  - a. Sawmill Pond
  - b. Beachdale Avenue
  - c. Hodge Pond Road
4. Sidewalks
  - a. ½ mile in Village
5. Bus Turnarounds the Town Plows
  - a. Gardner Road
  - b. Beachdale Avenue
  - c. Congdon Road
  - d. Hell Hollow Road
  - e. Hodge Pond Road
  - f. Rockville Road
  - g. North Shore Rd State Boat launch Parking Lot
  - h. Sand Hill Road
6. Contractors Hired to Plow
  - a. Voluntown/Sterling Transfer Station
  - b. Voluntown Elementary School
  - c. Dennison Hill Road
7. Department of Public Works Town Garage Facility
  - a. Fuel pump must stay open for busses, emergency vehicles, plow fueling
8. Other shared responsibilities owned by state and or other towns.
  - a. State Boat Launch Parking Lot (Helipad)
  - b. Hell Hollow Road (Access to Voluntown Roads), (Emergency Water Source)
  - c. Gallup Homestead Road Access to Bailey Pond Road (Town of Sterling)
  - d. DEP Trail 1 Entrance (Access to Voluntown Residence)

## **OPERATIONS**

Mechanical removal (plowing) is the most economical method of snow removal with the least environmental impact. Snow removal and ice control usually requires the timely application of chemical-abrasive mixture to roadway surfaces in combination with aggressive snow plowing operations. The Town of Voluntown employs treated salt at 300 pounds per lane mile. Plow Units are equipped with calibrated mechanical spreaders that accurately control the application rates of salt. Plow operators are instructed in the proper dispensing of the necessary quantity at the appropriate time.

## **MATERIALS**

Sodium Chloride- The use of sodium chloride combined with snow plowing is the most effective, most economical, and safest snow and ice control method currently available. Salt is most effective for melting purposes at temperatures above 20 degrees F., with reduced melting abilities as the temperature drops. In general, the purpose of salt is to (1) reduce adherence of snow to the pavement, (2) keep the snow in a “mealy” condition and thereby permit nearly full removal by plowing, and (3) prevent the formation of ice or snow ice (hard pack). Salt is not intended to take the place of snowplows.

## **MATERIAL APPLICATION**

The Town of Voluntown has switched to the use of treated calcium chloride (salt).

## **RATES OF APPLICATION**

Note: Total amounts may increase due to speed control and other factors.

		<b><u>Treated Salt</u></b>
<b><u>Conditions</u></b>	<b><u>Temp</u></b>	<b><u>Salt Portion LBS PER LANE MILE</u></b>
Sleet & Freezing Rain	Variable	300 lbs. PLM
Snow	20 Degrees and Up	250 lbs. PLM
Snow	Below 20 Degrees	250 lbs. PLM, 300 lbs. PLM hills, intersections

## **SPREADING PRACTICES**

Each material spreading unit should be calibrated annually to ensure that selected rates of application are attained. Treated salt is normally applied to the middle (crown) of the road and on the high side of banked curves. Spread width may vary depending on the action of the traffic. Width of material spread (throw plus roll) should be restricted to increase the effectiveness of the application. Spreading applications in the Town of Voluntown should be conducted at the speed of 25mph or less. Spread patterns and truck speed are to be adjusted to retain material within the lane where material is required. Timing of the initial application during each storm is critical. Treated salt is applied early in the storm.

Portions of each plow run are unique due to various physical conditions and will require a greater application rate or an additional application during some storms. However, these areas should be judged and treated separately and not used as a measure to evaluate the entire plow run.

Frozen precipitation including sleet and the build-up of ice caused by freezing rain are special situations, and not subject to procedures above. When a changeover from snow or sleet to freezing rain is predicted or anticipated, snow and or sleet is left on the pavement to capture the freezing rain thereby preventing a glare ice situation, which without question is the most treacherous condition that occurs on roads. Treatment includes application of salt at a rate of 300 lbs. per lane mile as needed throughout the storm. Heavy rain tends to wash off applied salt, making it difficult to keep the pavement ice-free.

## **PLOW OPERATIONS**

Truck mounted snowplows are used to clear Town of Voluntown 30 miles of road and other identified responsibilities (see SCOPE) of frozen precipitation.

For light accumulation snowfalls, snow squalls of short duration, plowing may begin immediately and include simultaneous spreading of salt-abrasive mixture to provide the desired expectation results quickly and efficiently.

For snowstorms with predicted accumulation more than 2 inches, plowing usually begins after the initial after 1-2 inches of snow has fallen and plowing continues for the duration of the storm. Consideration must be given to the time required for the salt chemical reaction to occur as to not plow off the active ingredient before it has had time to work. After the storm terminates, a final cleanup plow run is made, and a light salt application is made as necessary to remove any remaining residue.

The Town of Voluntown intends to perform snow removal and ice control operations in a consistent and impartial manner throughout the town. The following information is provided to clarify actions regarding this policy.

## **PLOW ROUTES**

The town is divided into 5 plow routes. Identified as North Run, Eastern Run, Village Run, South Run, and contractor responsibilities. All are done simultaneously, methodically, and repeatedly. These runs may be modified to best achieve the service expectation with the available resources.

<b><u>NORTH</u></b>	<b><u>EAST</u></b>	<b><u>VILLAGE</u></b>	<b><u>SOUTH</u></b>	<b><u>CONTRACTOR RESPONSIBILITIES</u></b>
CAMPBELL MILL ROAD	FORGE HILL	GATE STREET	HI-TOP HILL ROAD	DENNISON HILL ROAD
WYLIE SCHOOL RD N.	TEN ROD ROAD	LILLIBRIDGE AVENUE	WILSON ROAD	V/S TRANSFER STATION
STONE HILL ROAD	VALLEY DRIVE	CARROLL ROLL	KINNIE ROAD	VOLUNTOWN ELEMENTARY SCHOOL
BROWN ROAD	TANGLEWOOD LANE	DEP TRAIL 1	HODGE POND ROAD	
WILLIAMS ROAD	LAKE SIDE TERRACE	CHURCH STREET	GALLUP ROAD	
CONGDON ROAD	BENNETT ROAD	BEACHDALE AVENUE	RACHEL LANE	
HELL HOLLOW ROAD	BENNETT CIRCLE	SHETUCKET TURNPIKE	SAND HILL ROAD	
GARDNER ROAD	BENNETT EXTENSION	WYLIE SCHOOL RD S.	WHEELER ROAD	
BAILEY POND ROAD	LAURAL DRIVE	NORTH SHORE ROAD		
MOHUNGANUCK RD.	BEACHVIEW ROAD	BASSETT MILL ROAD		
	JAMES ROAD EXT.			
	JAMES ROAD			
	TARKLIN HILL ROAD			

## **OTHER EMERGENCIES**

The resources identified by this policy responsible for snow and ice control shall only be dispatched to other emergencies occurring during snow and ice control operations by the Town of Voluntown First Selectman or designee. Exceptions include non-electrical tree hazards blocking the road.

## **WIDENING, PUSHING BACK SNOWBANKS**

Following storms with heavy snowfall or when several storms result in substantial snow banking the Town of Voluntown will perform roadway widening by pushing back snowbanks known as 'pushing back'. This is done (1) to provide room for future snow storage, (2) to reduce or prevent melted snow from running out into the roadway pavement and creating an ice condition, (3) to increase safe sight lines at intersections and driveways, and (4) to maintain a uniform line by eliminating protrusions at driveways and intersections.

## **DRIVEWAYS**

Town of Voluntown residents are responsible for the access to his or her driveway. Unfortunately, there is no way to prevent depositing snow in previously cleaned driveways or walkways except to leave a mound of snow. The Town of Voluntown recommends leaving the roadside snow in place until the Town has completed the final cleanup and pushback.

## **UN-IMPROVED ROADS and BUS TURN-AROUNDS**

The Town of Voluntown does not plow minimal snow fall (2" or less) from un-improved roads and bus turnarounds when unimproved surface is not frozen. This is to prevent avoidable surface damage or displacement. Service expectation for un-improved roads and bus turnarounds shall be that 2" of snow may remain.

## **RIGHT-OF-WAY ENCROACHMENT**

### **1. PRIVATE SNOW IMPEDIMENTS**

The Town of Voluntown prohibits anyone from depositing snow and ice onto town roads. This encroaches on the Town right-of-way and impedes the VDPW cleanup efforts. This includes private or commercial snow and ice removal efforts intentional or unintentional.

### **2. MAILBOX DAMAGE**

Occasionally mailboxes or mailbox supporting devices are damaged by snow plow operations due to poor visibility, or lack of structural integrity to withstand the weight and/or volume of the snow being plowed. This damage is not deliberate and in most cases is unavoidable. Town of Voluntown is not responsible for damage and does not repair, replace, or re-erect boxes or supporting devices that are located within the town right-of-way. Mailboxes and support devices that are located within the town limits are the responsibility of the mailbox owner. There is a \$25 gift card available for qualifying damage repair or replacement when proof of contact from the plow is shown. Contact the Selectmen's Office to report damage. Please refer to USPS reference for mailbox installation, and to verify if your mailbox is currently correctly placed. <https://www.usps.com/manage/mailboxes.htm>

### **3. PRIVATE IMPEDIMENTS IN ROAD**

The Town of Voluntown prohibits encroachment on the town right of way including but not limited to roads, shoulders, and cul-de-sacs. The Town right-of-way including but not limited to: the traveled way, shoulder, and drainage appurtenances shall be continuously free of encroachment including but not limited to motor vehicles, recreational vehicles, and sports equipment. Encroachment on the right-of-way creates a safety hazard to residents, pedestrians, and vehicle operators by reducing sightlines, forcing operators to veer out of the travel lane, impeding emergency response, and preventing snow from being removed properly by the plow.

The Town of Voluntown recommends the installation of snow stakes by residence before the soil becomes frozen. Snow Stakes help plow operators distinguish between pavement and soil edges, possibly reducing soil damage. It is recommended snow stakes extend above the soil 30"-36" and are contrasted against snow with color or reflectivity. The installation of snow stakes should not interfere with traffic. Please note: the stakes are only a guide and are placed in the Town Right-of-Way

## **SAND FOR RESIDENT USE**

Voluntown Public Works keeps sand/salt mix for resident use in a bin located behind the Town Hall at the old town garage. Please return the access doors to the closed position when not in use.

## **RESOURCES**

1. Town of Voluntown Public Works equipment

Town of Voluntown vehicles are identified by a Town Seal. When conducting road maintenance or emergency operations, equipment and vehicle presence is accentuated by an amber strobe light.

2. Town of Voluntown full-time, and part-time employees
3. Contractors

## **PROCEDURE**

### **Pre-Season**

1. Evaluate, Procure, Store Treated Salt
  - a) Stored on location off of Brown Road
  - b) Pushed up into covered containment area
2. Cut back offending branches from roadside trees to reduce possible damage to Town of Voluntown Snow / Ice Control Equipment, as well to assist in solar gain on asphalt with roadside mowing.
3. Evaluate, Procure, Maintain, Repair, Modify Snow / Ice Control Equipment
  - a) Truck Preventative Maintenance, Repairs
    - (1) Oil and Fluid Changes (Truck 1,2,3,550, Mini Loader)
    - (2) Plow Cutting Edges (Procure and install when needed)
    - (3) Visual Inspections and repair of salt storage facility
    - (4) Inspect and repair Truck Lighting
4. Install delineators to aid in safe equipment operation around known hazards
  - a) Storm Drain Culverts
  - b) Stones / Ledge
  - c) Hazardous Road Edges
  - d) Turnarounds
  - e) Lead guideposts
  - f) Contractor, part-time Employee snow and ice control orientation

### **Pre-Snow / Ice Event**

1. Shift before event, or Continuation of Previous Event
  - a) Close out current mechanical repairs, maintenance, modifications
  - b) Fill Resident container located old Town Garage
  - c) Check / Replenish salt supply to town hall and library
  - d) Load trucks treated salt

- e) Storm Drain Inspection, debris removal if needed
  - f) Normal daily operations
  - g) Procure supplies for extended work shifts
- 2. Develop general time assessment of event based on available information
  - a) State Storm Emergency Weather Advisory
  - b) Local Meteorology Sources

### **On Call Period**

1. Team Evaluation of weather and starting time Via Cell / Text, Email.
2. Identify Call in Start Time based on available information
3. Prepare personal items for unknown duration at work

### **Active Snow/ Ice Event Operations**

1. Route Planning and final preparations / adaptations
  - a) Prep for unknown duration at work
  - b) Route changes / Updates
  - c) Safety Update
  - d) Weather evaluation
2. Pretreat roads with treated salt
3. Plow travel lanes of road "Repeat"
4. Push Back / Cleanup "Repeat"
  - a) Push back Road edges
  - b) Clean up intersections
  - c) Clear bus turnarounds
  - d) Clear Cul-de-Sac
5. Clear Parking lots Hydrants
6. Clear Sidewalks / salt required areas
7. Required DOT safety rest break (4 hours) after 16hrs OTJ
8. Truck refueling, personal food water break (TBD)
9. Field repairs if needed (TBD)

### **Post Snow / Ice event**

1. 1.Pre- Bus Run follow up due to freeze refreeze
  - a) Scraping, salt treating of
    - i. Town roads
    - ii. Bus turnarounds
    - iii. Emergency assistance at VES & bus parking depot
2. Storm drain inspection, impediment removal as needed
3. Refill resident supply located behind Town Hall at old garage
4. Unload/reload salt from trucks to/from containment area located off of Brown Rd.
5. Repairs, refresh equipment ASAP for next event
6. Respond to resident concerns at direction of First Selectman or Selectmen's designee.



7. Evaluate/Improve sightlines

**POLICY EVALUATION**

The Town of Voluntown Snow Removal and Ice Control Policy shall be evaluated and revised annually, or when policy changes are implemented. This revision shall be recorded by updating the revision date below.

**COMMUNICATION**

A revised copy of this document shall be made available to all employees and contractors who will be expected to provide snow and ice control services for the Town of Voluntown. Any Questions specific to the execution of the snow and ice duties shall be addressed prior to the commencement of snow / ice control activities.

Created by VDPW